

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1033999

Luminaire Tested: S124RDIW-B1195D470UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033999
REPORT IS A COMBINATION OF REPORTS P1000213 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1195D470UB50-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

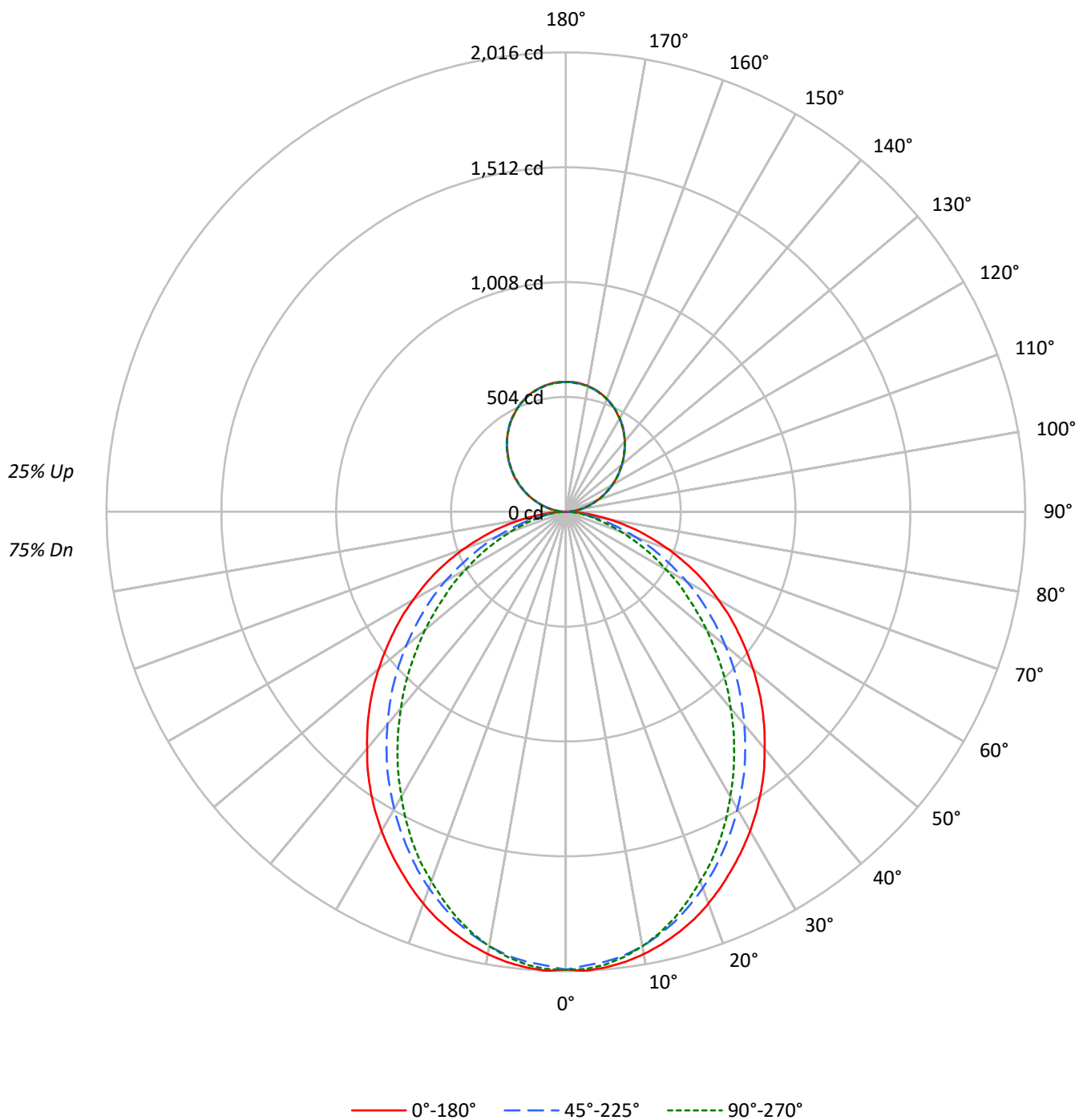
Lumens per Lamp: N/A
Luminaire Lumens: 6226.0 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	113	113	113	113	107	107	107	107	97	97	97	87	87	87	79	79	79
1	104	99	96	92	98	95	91	88	86	83	81	78	76	74	70	69	67
2	95	87	81	76	90	83	78	73	76	71	68	69	65	62	62	60	57
3	87	77	70	64	82	74	67	62	67	62	57	61	57	53	56	52	49
4	80	69	61	54	75	66	58	53	60	54	49	55	50	46	50	46	43
5	73	61	53	47	70	59	51	46	54	48	43	49	44	40	45	41	38
6	68	55	47	41	64	53	46	40	49	42	38	45	40	35	41	37	33
7	63	50	42	36	60	48	41	35	45	38	33	41	36	32	38	33	30
8	59	46	38	33	56	44	37	32	41	34	30	38	32	28	35	30	27
9	55	42	34	29	52	41	33	29	38	31	27	35	29	26	32	28	24
10	51	39	31	26	49	37	31	26	35	29	25	32	27	23	30	25	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16390	16390	16390
5°	16391	15903	15905
10°	16252	15401	15218
15°	16029	14776	14408
20°	15735	14064	13484
25°	15370	13295	12581
30°	15013	12511	11568
35°	14620	11716	10578
40°	14151	10860	9561
45°	13713	10012	8554
50°	13213	9085	7530
55°	12675	8135	6475
60°	12077	7126	5432
65°	11499	5969	4428
70°	10677	4752	3384
75°	9625	3457	2367
80°	8037	2121	1701
85°	6047	1222	935

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13713 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	3.0
10°-20°	527.0	8.5
20°-30°	760.8	12.2
30°-40°	862.2	13.8
40°-50°	832.5	13.4
50°-60°	692.1	11.1
60°-70°	477.7	7.7
70°-80°	241.4	3.9
80°-90°	62.5	1.0
90°-100°	37.1	0.6
100°-110°	111.2	1.8
110°-120°	189.0	3.0
120°-130°	249.2	4.0
130°-140°	279.9	4.5
140°-150°	275.1	4.4
150°-160°	231.4	3.7
160°-170°	153.9	2.5
170°-180°	53.9	0.9
0°-30°	1476.7	23.7
0°-40°	2339.0	37.6
0°-60°	3863.6	62.1
0°-90°	4645.2	74.6
90°-120°	337.3	5.4
90°-150°	1141.5	18.3
90°-180°	1581.0	25.4
0°-180°	6226.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2010	2010	2010	2010	2010	
5°	2007	2001	1982	1998	1994	190
15°	1911	1898	1859	1856	1845	539
25°	1728	1700	1637	1611	1596	796
35°	1494	1445	1368	1316	1288	934
45°	1219	1162	1070	994	966	940
55°	923	862	762	682	652	826
65°	628	562	463	397	379	620
75°	334	277	205	169	160	352
85°	83	52	48	45	45	91
90°	1	6	10	12	13	7
95°	26	30	34	35	35	29
105°	103	103	105	106	108	109
115°	192	192	191	191	190	189
125°	280	280	279	278	278	249
135°	361	364	364	363	361	279
145°	438	440	441	440	439	274
155°	502	502	502	504	502	231
165°	547	546	545	547	546	154
175°	569	567	566	569	566	54
180°	570	570	570	570	570	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2009.9	2009.9	2009.9	2009.9	2009.9
2.5°	2016.0	2009.9	1992.9	2009.9	2008.3
5°	2006.8	2000.6	1982.2	1997.6	1994.5
7.5°	1992.9	1986.8	1963.7	1974.5	1969.8
10°	1971.4	1963.7	1936.0	1942.1	1936.0
12.5°	1943.7	1934.5	1900.6	1903.7	1894.4
15°	1911.4	1897.5	1859.0	1856.0	1845.2
17.5°	1874.4	1854.4	1809.8	1802.1	1786.7
20°	1829.8	1809.8	1757.5	1745.2	1725.2
22.5°	1780.6	1757.5	1700.5	1680.5	1665.1
25°	1728.2	1700.5	1637.4	1611.3	1595.9
27.5°	1674.4	1640.5	1574.3	1543.6	1522.0
30°	1617.4	1579.0	1506.6	1468.2	1443.5
32.5°	1557.4	1512.8	1437.4	1391.2	1368.1
35°	1494.3	1445.1	1368.1	1315.8	1288.1
37.5°	1428.1	1377.4	1292.7	1235.8	1208.1
40°	1357.3	1306.6	1218.8	1154.2	1126.5
42.5°	1289.6	1235.8	1143.4	1077.3	1048.0
45°	1218.8	1161.9	1069.6	994.2	966.5
47.5°	1146.5	1088.0	992.6	914.1	883.4
50°	1072.6	1012.6	914.1	837.2	807.9
52.5°	997.2	938.8	837.2	758.7	727.9
55°	923.4	861.8	761.8	681.8	652.5
57.5°	851.0	786.4	687.9	606.3	584.8
60°	772.6	711.0	612.5	532.5	507.9
62.5°	701.8	637.1	535.6	463.2	444.8
65°	627.9	561.7	463.2	397.0	378.6
67.5°	550.9	487.8	395.5	337.0	315.5
70°	478.6	414.0	326.3	275.5	260.1
72.5°	401.7	344.7	263.2	221.6	207.8
75°	334.0	277.0	204.7	169.3	160.1
77.5°	263.2	213.9	152.4	127.7	124.7
80°	195.4	150.8	104.6	100.0	98.5
82.5°	137.0	97.0	75.4	72.3	70.8
85°	83.1	52.3	47.7	44.6	44.6
87.5°	35.4	23.1	21.5	20.0	21.5
90°	1.3	6.2	9.7	12.3	13.2
92.5°	11.5	17.2	19.4	20.7	21.1
95°	26.4	30.4	33.5	34.8	34.8
97.5°	42.3	45.8	49.3	51.1	51.1
100°	61.7	63.4	67.4	68.3	68.3
102.5°	82.0	82.4	85.9	87.2	87.7
105°	102.7	103.1	104.9	106.2	107.5
107.5°	124.3	124.7	125.1	126.9	126.5
110°	146.3	147.2	146.7	145.8	147.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	169.2	169.2	168.3	168.3	168.3
115°	192.1	192.1	191.2	190.8	190.3
117.5°	213.7	213.7	213.3	211.9	210.6
120°	235.3	237.1	235.7	233.5	234.4
122.5°	257.8	258.2	257.8	256.4	254.2
125°	279.8	279.8	279.4	278.5	277.6
127.5°	299.6	300.9	300.1	299.2	298.7
130°	320.8	322.1	322.1	321.2	319.5
132.5°	342.4	343.2	342.8	341.9	341.5
135°	360.9	363.5	363.5	362.6	361.3
137.5°	381.6	382.9	383.8	382.5	382.9
140°	402.3	403.2	403.2	402.7	402.3
142.5°	421.2	422.1	421.7	421.7	421.7
145°	438.4	440.2	440.6	440.2	438.9
147.5°	456.0	458.2	457.8	457.4	456.9
150°	471.9	473.7	473.7	473.7	473.2
152.5°	486.9	487.8	488.2	489.5	488.2
155°	502.3	502.3	501.9	503.6	501.9
157.5°	515.5	514.6	514.6	516.0	514.6
160°	527.0	526.5	526.1	527.4	525.2
162.5°	537.6	536.2	535.8	538.4	536.2
165°	546.8	545.5	544.6	547.3	545.5
167.5°	554.3	552.5	552.5	555.2	552.5
170°	560.5	558.3	558.7	561.4	558.3
172.5°	564.9	563.1	563.1	566.2	563.1
175°	568.8	566.6	566.2	569.3	566.2
177.5°	570.6	568.4	568.4	571.5	568.0
180°	569.7	569.7	569.7	569.7	569.7

(END OF REPORT)